



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

Division of Drinking Water

August 30, 2016

PWS No. 0910015

Certified Mail Return/Receipt
No. 7009 2250 0004 3622 0338

Kirk Wooldridge
General Manager
Tahoe Keys Water Company
356 Ala Wai Blvd.
South Lake Tahoe, CA 96150

TAHOE KEYS WATER COMPANY PUBLIC WATER SYSTEM (PWS NO. 0910015)

CITATION No. 01_09_16C_004

Enclosed is the Division of Drinking Water Citation No. 01_09_16C_004 issued to the Tahoe Keys Water Company public water system (PWS# 0910015). Please note there are certain deadlines associated with this Citation.

If you have any questions, please feel free to contact Salvador Turrubiarres at (916) 552-9998 or via email at Salvador.turrubiarres@Waterboards.ca.gov.

Sincerely,

Ali R. Rezvani, P.E.,
Sacramento District Engineer
Drinking Water Field Operations Branch

Enclosures

cc: Salvador Turrubiarres, P.E. – Associate Sanitary Engineer

Barbara D. Houghton, PG, CHG, REHS
Environmental Health Manager
County of El Dorado
Community Development Agency
Environmental Management Division
2850 Fairlane Court, Bldg C
Placerville, CA 95667

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

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STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
DIVISION OF DRINKING WATER

TO: Tahoe Keys Water Company
356 Ala Wai Blvd.
South Lake Tahoe, CA 96150

Attn: Kirk Wooldridge, General Manager
Tahoe Keys Property Owners Association

**CITATION FOR VIOLATION OF CALIFORNIA CODE OF REGULATIONS,
TITLE 22, DIVISION 4, CHAPTER 15, ARTICLE 3, SECTION 64426.1
WATER SYSTEM NO. 0910015
CITATION NO. 01-09-16C-004
Issued on August 30, 2016**

Section 116650 of the California Health and Safety Code (CHSC) authorizes the issuance of a citation to a public water system for violation of the California Safe Drinking Water Act (Health and Safety Code, Division 104, Part 12, Chapter 4, commencing with Section 116270) (hereinafter “California SDWA”), or any regulation, standard, permit or order issued or adopted thereunder.

In accordance with CHSC, Division 104, Part 12, Chapter 4, Article 1, Section 116271, the State Water Resources Control Board, acting by and through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for the Division (hereinafter "Deputy Director"), hereby issues a citation to the Tahoe Keys Water

1 Company public water system (PWS# 0910015) (hereinafter, Water System) (356 Ala
2 Wai Blvd., South Lake Tahoe, CA 96150) for violation of California Code of
3 Regulations (CCR), Title 22, Division 4, Article 3, Section 64426.1.

4
5 **APPLICABLE AUTHORITIES**

6
7 **CHSC, Division 104, Part 12, Chapter 4, Article 1, Section 116275 (b) & (ac)**

8 **state:**

9
10 (b) "Department" means the state board.

11
12 (ac) "State board" means the State Water Resources Control Board.

13
14 **CHSC Division 104, Part 12, Chapter 4, Article 9, Section 116650 states:**

15
16 (a) If the department determines that a public water system is in violation of this
17 chapter or any regulation, permit, standard, citation, or order issued or
18 adopted thereunder, the department may issue a citation to the public water
19 system. The citation shall be served upon the public water system personally
20 or by certified mail. Service shall be deemed effective as of the date of
21 personal service or the date of receipt of the certified mail. If a person to
22 whom a citation is directed refuses to accept delivery of the certified mail, the
23 date of service shall be deemed to be the date of mailing.

24 (b) Each citation shall be in writing and shall describe the nature of the violation
25 or violations, including a reference to the statutory provision, standard, order,
26 citation, permit, or regulation alleged to have been violated.

27 (c) A citation may specify a date for elimination or correction of the condition
28 constituting the violation.

1 (d) A citation may include the assessment of a penalty as specified in subdivision
2 (e).

3 (e) The department may assess a penalty in an amount not to exceed one
4 thousand dollars (\$1,000) per day for each day that a violation occurred, and
5 for each day that a violation continues to occur. A separate penalty may be
6 assessed for each violation.

7
8 **CCR, Title 22, Division 4, Chapter 16, Article 3, Section 64426.1 in relevant part**
9 **states:**
10

11 (a) Results of all samples collected in a calendar month pursuant to
12 Sections 64423, 64424, and 64425 that are not invalidated by the
13 Department or the laboratory shall be included in determining
14 compliance with the total coliform MCL. Special purpose samples such
15 as those listed in §64421(b) and samples collected by the water
16 supplier during special investigations shall not be used to determine
17 compliance with the total coliform MCL.

18 (b) A public water system is in violation of the total coliform MCL when any
19 of the following occurs:

20 (1) For a public Water system which collects at least 40 samples per
21 month, more than 5.0 percent of the samples collected during any
22 month are total coliform-positive; or

23 (2) For a public water system which collects fewer than 40 samples per
24 month, more than one sample collected during any month are total
25 coliform-positive; or

26 (3) Any repeat sample is Fecal coliform Positive or E. coli-positive; or



1 (4) Any repeat sample following a fecal coliform-positive or E. coli-
2 positive routine sample is total coliform-positive.

3 (c) If a public water system is not in compliance with paragraphs (b)(1)
4 through (4), during any month in which it supplies water to the public,
5 the water supplier shall notify the Department by the end of the
6 business day on which this is determined, unless the determination
7 occurs after the Department office is closed, in which case the supplier
8 shall also notify the Department within 24 hours of the determination.
9 The water supplier shall also notify the consumers served by the water
10 system. A Tier 2 Public Notice shall be given for violations of
11 paragraphs (b) (1) or (2), pursuant to section 64463.4. A Tier 1 Public
12 Notice shall be given for violations of paragraphs (b)(3) or (4), pursuant
13 to section 64463.1.

14 **STATEMENT OF FACTS**

15
16
17 The Water System is operated under Water Supply Permit No. 81-032, issued on
18 July 31, 1981, and respective amendments.

19
20 The Water System is classified as a Community Water System. According to the
21 2015 Annual Report, the Water System serves a permanent population of 1,410 and a
22 seasonal population of approximately 5,640. The Water System has 1,563 service
23 connections. The Water System has three groundwater sources of water supply: Well
24 1 (Source No. 0910015-001), Well 2 (Source No. 0910015-002), and Well 3 (Source
25 No. 0910015-003). Well 2 has a granulated activated carbon (GAC) treatment for
26 removal of the volatile organic chemical (VOC) Tetrachloroethylene (PCE) followed by
27 disinfection. Continuous disinfection is not available at Well 1 and Well 3.



1
2 The Water System, according to Section 64423 of Title 22, is required to collect at
3 least six (6) samples per month for analysis of coliform bacteria content to determine
4 compliance with the MCL for total and fecal coliform bacteria. According to the Water
5 System Bacteriological Sample Siting Plan (BSSP), dated November 6, 2006, eight
6 (8) samples are collected per month, at a frequency of two samples per weekly. The
7 Division approved the BSSP on December 5, 2006.

8
9 On June 16, 2016, the Division received microbiological analyses results of several
10 water samples from the Water Systems contracted laboratory, WETLAB (Western
11 Environmental Testing Laboratory). All water samples were collected on June 14,
12 2016. Two of the samples were total coliform-positive and E. coli-negative. Of the
13 two water samples that were total coliform-positive, one was labeled "1947 Kokanee"
14 and one was labeled "Well # 1". Both samples were labeled as "Compliance
15 Monitoring". The Division contacted the Water System on the same day repeat water
16 sample collection.

17
18 On June 17, 2016, the Water System notified the Division that it had collected repeat
19 sample sets (upstream and downstream samples) on June 16, 2016. All samples
20 collected on June 16, 2016, were total coliform-negative and E. coli-negative.

21
22 During the month of June 2016, the Water System collected 17 water samples for
23 bacteriological monitoring. Of the 17 samples taken during June 2016, two of the
24 samples were total coliform-positive and E. coli-negative. The remaining 15 water
25 samples were total coliform-negative and E. coli-negative.

1 **DETERMINATION**

2

3 The Water System has failed to comply with MCL of the TCR regulations for the

4 Tahoe Keys Water Company public water system distribution samples in the month of

5 June 2016. Consequently, the Division has determined that the Water System

6 violated Section 64426.1, Article 3, Chapter 15, Division 4, Title 22 of the CCR for the

7 month of June 2016.

8

9 **DIRECTIVES**

10

11 The Water System is hereby directed to take the following actions:

- 12
- 13 1. Comply with Section 64426.1, Article 3, Chapter 15, Division 4, Title 22 of the
- 14 CCR in future monitoring periods.
- 15
- 16 2. Within 30 days of the issuance of this Citation, notify all persons served by the
- 17 Tahoe Keys Water Company public water system of the MCL violation as
- 18 required by Section 64426.1(c), Article 3, Chapter 15, Division 4, Title 22, of
- 19 the CCR. Notification shall be completed in accordance with each of the
- 20 following:
- 21
- 22 a. Mail or direct delivery of the notice contained in Attachment 'A' to each
- 23 customer receiving a bill including those that provide their drinking water to
- 24 others (e.g., schools or school systems, apartment building owners, or large
- 25 private employers), and other service connections to which water is
- 26 delivered by the Water System.
- 27

1 b. Provide the notice contained in Attachment 'A' to customers using one or
2 more of the following methods to reach persons not likely to be reached by
3 a public posting:

- 4 i. Publication in a local newspaper,
5 ii. Posting in conspicuous public places within the service area,
6 iii. Posting on the Internet, or
7 iv. Delivery to community organizations.

8 Changes and/or modifications to Attachment 'A' shall not be made unless
9 approved by the Division.
10

11 3. Complete and return Attachment 'B' "Certification of Completion of Public
12 Notification" form within 10 days of receipt of giving public notice. A copy of the
13 notice used to provide public notification shall be attached to the form.
14

15 4. Within 30 days of receipt of this Citation, the Water System shall submit a
16 written response to the Division indicating its willingness to comply with
17 directives of this Citation.
18

19 5. Within 30 days of receipt of this Citation, the Water System shall conduct and
20 submit Level 1 assessment in accordance to the Federal revised Total Coliform
21 Rule.
22

23 The Division reserves the right to make such modifications to this Citation as it may
24 deem necessary to protect public health and safety. Such modifications may be
25 issued as amendments to this Citation, and shall be deemed effective upon issuance.
26

1 Nothing in this Citation relieves Tahoe Keys Water Company of its obligation to meet
2 the requirements of the California Safe Drinking Water Act (SDWA), or of any
3 regulation, permit, standard, or order issued or adopted thereunder.

4
5 All submittals required by this Citation shall be submitted to the Division at the
6 following address:

7
8 Ali R. Rezvani, P.E.
9 Sacramento District Engineer
10 Field Operations Branch
11 Division of Drinking Water
12 State Water Resources Control Board
13 1001 I Street 13th Floor
14 Sacramento, CA 95814
15 (916) 449-5600
16
17
18

19 **PARTIES BOUND**

20
21 This Citation shall apply to and be binding upon the Tahoe Keys Water Company, its
22 officers, directors, shareholders, agents, employees, contractors, successors, and
23 assignees.
24

25 **SEVERABILITY**

26
27 The Directives of this Citation are severable, and the Tahoe Keys Water Company
28 shall comply with each and every provision thereof, notwithstanding the effectiveness
29 of any other provision.
30



FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the Division to: issue citation with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any permit, regulation, permit or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the Division to take action to suspend or revoke a permit that has been issued to a public water system if the system has violated applicable law or regulations or has failed to comply with an order of the Division; and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with violates an order of the Division. The Division does not waive any further enforcement action by issuance of this citation.

August 30, 2016

Date

Ali R. Rezvani

Ali R. Rezvani, P.E.
Sacramento District Engineer
Field Operations Branch
Division of Drinking Water
State Water Resources Control Board

Attachments:

1. Public Notification Template
2. Proof of Notification Form
3. Level 1 Assessment Form

Certified Mail No. 7009 2250 0004 3622 0338

cc: County of El Dorado, Department of Environmental Health



ATTACHMENT 1:

PUBLIC NOTIFICATION TEMPLATE

Instructions for Tier 2 Resolved Total Coliform Notice Template

Template Attached

Since exceeding the total coliform bacteria maximum contaminant level is a Tier 2 violation, you must provide public notice to persons served as soon as practical but within 30 days after you learn of the violation [California Code of Regulations, Title 22, Chapter 15, Section 64463.4(b)]. **Each water system required to give public notice must submit the notice to the State Water Resources Control Board, Division of Drinking Water (DDW) for approval prior to distribution or posting, unless otherwise directed by the DDW [64463(b)].**

Notification Methods

You must use the methods summarized in the table below to deliver the notice to consumers. If you mail, post, or hand deliver, print your notice on letterhead, if available.

<i>If You Are a...</i>	<i>You Must Notify Consumers by...</i>	<i>...and By One or More of the Following Methods to Reach Persons Not Likely to be Reached by the Previous Method...</i>
Community Water System [64463.4(c)(1)]	Mail or direct delivery ^(a)	Publication in a local newspaper
		Posting ^(b) in conspicuous public places served by the water system or on the Internet
		Delivery to community organizations
Non-Community Water System [64463.4(c)(2)]	Posting in conspicuous locations throughout the area served by the water system ^(b)	Publication in a local newspaper or newsletter distributed to customers
		Email message to employees or students
		Posting ^(b) on the Internet or intranet
		Direct delivery to each customer

(a) Notice must be distributed to each customer receiving a bill including those that provide their drinking water to others (e.g., schools or school systems, apartment building owners, or large private employers), and other service connections to which water is delivered by the water system.

(b) Notice must be posted in place for as long as the violation or occurrence continues, but in no case less than seven days.

The notice attached is appropriate for the methods described above. However, you may wish to modify it before using it for posting. If you do, you must still include all the required elements and leave the health effects and notification language in italics unchanged. This language is mandatory [64465].

Multilingual Requirement

The notice must (1) be provided in English, Spanish, and the language spoken by any non-English-speaking group exceeding 10 percent of the persons served by the water

system and (2) include a telephone number or address where such individuals may contact the water system for assistance.

If any non-English-speaking group exceeds 1,000 persons served by the water system but does not exceed 10 percent served, the notice must (1) include information in the appropriate language(s) regarding the importance of the notice and (2) contain the telephone number or address where such individuals may contact the water system to obtain a translated copy of the notice from the water system or assistance in the appropriate language.

Population Served

Make sure it is clear who is served by your water system -- you may need to list the areas you serve.

Description of the Violation

Make sure that the notice is clear about the fact that the coliform problem has been resolved, and there is no current cause for concern. The description of the violation and the MCL vary depending on the number of samples you take. The following table should help you complete the second paragraph of the template.

<u>If You Take Fewer Than 40 Samples a Month</u>	<u>If You Take 40 or More Samples a Month</u>
State the number of samples testing positive for coliform. The standard is that no more than one sample per month may be positive.	State the percentage of samples testing positive for coliform. The standard is that no more than 5.0 percent of samples may test positive each month.

Corrective Action

In your notice, describe corrective actions you have taken. Listed below are some steps commonly taken by water systems with total coliform violations. Use one or more of the following actions, if appropriate, or develop your own:

- "We have increased sampling for coliform bacteria to catch the problem early if it recurs."
- "The well and/or distribution system has been disinfected and additional samples do not show presence of coliform bacteria."

After Issuing the Notice

Send a copy of each type of notice and a certification that you have met all the public notice requirements to the DDW within ten days after you issue the notice [64469(d)].

It is recommended that you notify health professionals in the area of the violation. People may call their doctors with questions about how the violation may affect their health, and the doctors should have the information they need to respond appropriately.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.

Tradúzcalo o hable con alguien que lo entienda bien.

Tahoe Keys Water Company Had Levels of Coliform Bacteria Above the Drinking Water Standard

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what you should do, what happened, and what we did to correct this situation.

We routinely monitor for drinking water contaminants. We took 17 water samples to test for the presence of coliform bacteria during June 2016. Two (2) of those samples showed the presence of total coliform bacteria. The standard for Tahoe Keys Water Company is that no more than **one (1)** sample per month may do so.

What should I do?

- **You do not need to boil your water or take other corrective actions.**
- This is not an emergency. If it had been, you would have been notified immediately. Total coliform bacteria are generally not harmful themselves. *Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.*
- Usually, coliforms are a sign that there could be a problem with the system's treatment or distribution system (pipes). Whenever we detect coliform bacteria in any sample, we do follow-up testing to see if other bacteria of greater concern, such as fecal coliform or *E. coli*, are present. **We did not find any of these bacteria in our subsequent testing, and further testing shows that this problem has been resolved.**
- People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from U.S. EPA's Safe Drinking Water Hotline at 1(800) 426-4791.
- If you have other health issues concerning the consumption of this water, you may wish to consult your doctor.

What happened? What was done?

[Describe corrective action].

For more information, please contact **[name of contact]** at **[phone number]** or **[mailing address]**.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

Secondary Notification Requirements

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- **SCHOOLS:** Must notify school employees, students, and parents (if the students are minors).
- **RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS** (including nursing homes and care facilities): Must notify tenants.
- **BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS:** Must notify employees of businesses located on the property.

This notice is being sent to you by Orange Vale Water Company.

State Water System ID#: 0910015. Date distributed: _____.

Tahoe Keys Water Company (PWS No. 0910015)

Citation No. 01_09_16C-004

August 30, 2016

ATTACHMENT 2:

PROOF OF NOTIFICATION FORM

PROOF OF NOTIFICATION**Citation No. 01_09_16C_004****Name of Water System: Tahoe Keys Water Company****Public System Number: 0910015****Certification**

As required by Section 116450 of the California Health and Safety Code, we notified the users of the water supplied by the Tahoe Keys Water Company water system of the violation of the Total Coliform Maximum Contaminant Level (MCL) during the month of June 2016. We complied with Citation No. 01_09_16C_004 as indicated below:

Required Action	Date Completed
Public Notification – Daily Newspaper Notice	
Public Notification – Mail or Hand Delivery	

 Signature of Water System Representative

 Date

Please attach a copy of the notice as published in the daily newspaper within the areas served by the system.

THIS FORM MUST BE COMPLETED AND RETURNED TO THE DEPARTMENT

Disclosure: Be advised that Section 116725 and 116730 of the California Health and Safety Code states that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the attached order may be liable for a civil penalty not to exceed five thousand dollars (\$5,000) for each separate violation for each day that violation continues. In addition, the violators may be prosecuted in criminal court and upon conviction, be punished by a fine of not more than \$25,000 for each day of violation, or be imprisoned in county jail not to exceed one year, or by both the fine and imprisonment.

ATTACHMENT 3:

rTCR LEVEL 1 ASSESSMENT INFORMATION

California TCR – rTCR Interim Requirements

Total Coliform MCL Exceedances	Current CA TCR	Federal rTCR	Additional Actions
<ul style="list-style-type: none"> 2 or more TC-positive samples, if collecting less than 40 samples per month Greater than 5.0% TC-positive samples, if collecting 40 or more samples per month 	<p>Must...</p> <ul style="list-style-type: none"> Distribute Tier 2 Public Notification to customers within 30 days of learning of the exceedance Notify local DDW District Office or County Environmental Health Office within 24 hours of learning of the exceedance <p>Total Coliform MCL Violation</p>	<p>...And...</p> <ul style="list-style-type: none"> Conduct and submit Level 1 Assessment to state(or county) within 30 days <p>Level 1 Coliform Treatment Technique Trigger</p>	<p>A second Level 1 Coliform Treatment Technique Trigger within 12 months requires a Level 2 Assessment by the state (or county)</p>
<p>Acute Total Coliform MCL Exceedances</p> <ul style="list-style-type: none"> E.Coli-positive repeat sample following a TC-positive routine sample TC-positive repeat sample following a E.Coli-positive routine sample 	<p>Must...</p> <ul style="list-style-type: none"> Distribute Tier 1 Public Notification to customers within 24 hours of learning the exceedance. Notify local DDW District Office or County Environmental Health Office by the end of the business day <p>Acute Total Coliform MCL Violation</p>	<p>...And...</p> <ul style="list-style-type: none"> Notify local DDW District Office or County Environmental Health Office to schedule Level 2 Assessment <p>E.Coli MCL Violation Level 2 Coliform Treatment Technique Trigger</p>	
<p>E.coli MCL Exceedances</p> <ul style="list-style-type: none"> Failure to collect all required repeat samples following an E.coli-positive routine sample Failure to test for E.coli when any repeat sample is TC-positive 		<p>Must...</p> <ul style="list-style-type: none"> Distribute Tier 1 Public Notification to customers within 24 hours of learning the exceedance. Notify local DDW District Office or County Environmental Health Office by the end of the business day, and to schedule Level 2 Assessment <p>E.Coli MCL Violation Level 2 Coliform Treatment Technique Trigger</p>	

California TCR – rTCR Interim Requirements

	Current CA TCR	Federal rTCR	Additional Actions
Bacteriological Sample Siting Plans	Must... <ul style="list-style-type: none"> Identify routine sample locations representative of the distribution system Describe rotation plan for routine sample locations (if needed) Certify training of personnel collecting samples if not done by certified operators 	...And... <ul style="list-style-type: none"> Identify repeat sample locations for each routine sample location Identify triggered source sampling needed to comply with Ground Water Rule Identify sample schedule for collection of routine, repeat and triggered source sampling Seasonal system monitoring plan (if applicable) 	Submit revised Bacteriological Sample Siting Plan to local DDW District Office or County Environmental Health Office, as necessary.
Routine Sample Frequency	Community Water Systems <ul style="list-style-type: none"> Table 64423-A (Section 64423, Title 22, CCR) Non-Community Water Systems <ul style="list-style-type: none"> Table 64423-A, or reduced monitoring as approved by BSSP 	Community Water Systems <ul style="list-style-type: none"> Table 64423-A (Section 64423, Title 22, CCR) Non-Community Water Systems <ul style="list-style-type: none"> Table 64423-A, or reduced monitoring as approved by BSSP 	No changes necessary. Monitoring frequencies remain the same.
Repeat Sampling <ul style="list-style-type: none"> Following a TC-positive or E.coli-positive sample result 	Collect repeat sample set of 3 repeat samples (original, upstream, downstream within 5 service connections)	Collect repeat sample set of 3 repeat samples (original, upstream, downstream within 5 service connections)	No changes necessary
Repeat Sampling <ul style="list-style-type: none"> For systems collecting one routine sample per month 	Collect a repeat sample set of 4 repeat samples	Collect a repeat sample set of 4 repeat samples	<div>Failure to collect all required repeat samples is a Level 1 Coliform Treatment Technique Trigger</div>
Additional Routine Sampling <ul style="list-style-type: none"> For systems collecting less than 5 routine samples per month, and have at least one TC-positive sample in a month 	Must... <ul style="list-style-type: none"> Collect 5 routine samples the following month 		No changes necessary

REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 1 ASSESSMENT FORM

This form is intended to assist public water systems in completing the investigation required by the State Water Resources Control Board, Division of Drinking Water (Section 64426.8(a) of Title 22, California Code of Regulations) and may be modified to take into account conditions unique to the system.

ADMINISTRATIVE INFORMATION

Entity Name:	Name	System Address & Email	Telephone Number
PWSID NUMBER:	System Type:		
Operator in Responsible Charge (ORC)			
Person that collected TC samples if different than ORC			
System Owner			
Certified Laboratory for Microbiological Analyses			
Date Investigation Completed:			
Month(s) of Coliform Treatment Technique Trigger:			

INVESTIGATION DETAILS

SOURCE	WELL (name)	WELL (name)	WELL (name)	WELL (name)	WELL (name)	COMMENTS (attach additional pages if needed)
1. Inspect each well head for physical defects and report						
a. Is raw water sample tap upstream from point of disinfection?						
b. Is wellhead vent pipe screened?						
c. Is wellhead seal watertight?						
d. Is well head located in pit or is any piping from the wellhead submerged?						
e. Does the ground surface slope towards well head?						
f. Is there evidence of standing water near the wellhead?						
g. Are there any connections to the raw water piping that could be cross connections? (describe all connections in comments)						
h. Is the wellhead secured to prevent unauthorized access?						
i. To what treatment plant (name) does this well pump?						
j. How often do you take a raw water total coliform (TC) test?						
k. Provide the date and result of the last TC test at this location						
2. Inspect and review records for surface water source (if applicable)						
a. Have there been any events in the watershed or near the intake that might have contributed to TC+ or EC+ results? (Describe)						

TREATMENT	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	COMMENTS
1. If you provide continuous chlorination treatment was there any equipment failure?					
a. Did the distribution system maintain chlorine residual?					
b. Was emergency chlorination initiated? If yes, for how long?					
c. Did the distribution system lose chlorine residual?					
2. If you do not provide routine chlorination, was emergency chlorination initiated? If Yes, when?					
3. Inspect each point where disinfectant is added and report					
a. Is the disinfectant feed pump feeding disinfectant?					

REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 1 ASSESSMENT FORM

Page 2 of 4

TREATMENT	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	COMMENTS
b. What is the feed rate of disinfectant in ml/minute?						
c. What is the concentration of the disinfectant solution being fed? (percent or mg/l of chlorine as HOCl)						
d. By what method was the concentration of solution determined? (ex: measured, manufacturer's literature)						
e. What is the age (days) of the disinfectant solution currently being used at this treatment location?						
f. What is the raw water flow rate at the point where disinfectant is added in gallons per minute?						
g. What is the total chlorine residual measured immediately downstream from the point of application?						
h. What is the free chlorine residual measured immediately downstream from the point of application?						
i. What is the contact time in minutes from the point of disinfectant application to the first customer?						

SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings)	Routine Site TC+ or EC+	Upstream Site	Downstream Site	Sample 4 (specify)
1. What is the height of the sample tap above grade? (inches)				
2. Is the sample tap located in an exterior location or is it protected by an enclosure ?				
3. Is the sample tap threaded, have a swing arm (kitchen sink) or an aerator (sinks)?				
4. Is the sample tap in good condition, free of leaks around the stem or packing?				
5. Can the sample tap be adjusted to the point where a good laminar flow can be achieved without excessive splash?				
6. Is the sample tap and areas around the sample tap clean and dry (free of animal droppings other contaminants or spray irrigation systems)?				
7. Is the area around the sample tap free of excessive vegetation or other impediments to sample collection?				
8. Describe how the tap was treated in preparation for sample collection (ran water, swabbed with disinfectant, flamed, etc.).				
9. Is this sample tap designated on the sampling plan submitted with this information request?				
10. What were the weather conditions at the time of the positive sample (rainy, windy, and sunny)?				

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STORAGE	TANK (name)	TANK (name)	TANK (name)	TANK (name)	TANK (name)	COMMENTS
1. Is each tank locked to prevent unauthorized access?						
2. Are all vents of each tank screened down-turned to prevent dust and dirt from entering the tank?						
3. Is the overflow on each tank screened?						
4. Are there any unsealed openings in the tank such as access doors, water level indicators hatches, etc.?						
5. Is the roof/cover of the tank sealed and free of any leaks?						
6. Is the tank above ground or buried?						
a. If buried or partially buried, are there provisions to direct surface water away from the site.						
b. Has the interior of the tank been inspected to identify any sanitary defects, such as root intrusion?						
8. Does the tank "float" on the distribution system or are there separate inlet and outlet lines?						
9. What is the measured chlorine residual (total/free) of the water exiting the storage tank today ?						
10. What is the volume of the storage tank in gallons?						
11. Is the tank baffled?						
12. Prior to the TC+ or EC+, what was the previous date item #1-7 were checked and documented?						

DISTRIBUTION SYSTEM	SYSTEM RESPONSES
1. What is the minimum pressure you are maintaining in the distribution system?	
2. Did pressure in the distribution system drop to less than 5 psi prior to positive bacti?	
3. Has the distribution system been worked on within the last week? (taps, hydrant flushing, main breaks, mainline extensions, etc.) If yes, provide details.	
4. Are there any signs of excavations near your distribution system not under the direct control of your maintenance staff?	
5. Did you inspect your distribution system to check for mainline leaks? Do you or did you have a mainline leak?	
6. If there was a mainline leak, when was it repaired?	
7. On what date was the distribution system last flushed?	
8. Is there a written flushing procedure you can provide for our review?	
9. Do you have an active cross-connection control program?	
10. What is name & phone number of your Cross-Connection Control Program Coordinator?	
11. Is the review and testing of backflow prevention devices current?	
12. On what date was the last physical survey of the system done to identify cross-connections?	

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BOOSTER STATION	Response
1. Do you have a booster pump? How many?	
2. Do you have a standby booster pump if the main pump fails?	
3. Prior to bacteriological quality problems, did your booster pump fail?	
4. Do you notice standing water, leakage at the booster station?	

GENERAL OPERATIONS:	Response
1. Where there any power outages that affected water system facilities during the 30 days prior to the TC+ or EC + findings?	
2. Where there any main breaks, water outages, or low pressure reported in the service area where TC+ or EC+ samples were located.	
3. Does the system have backup power or elevated storage?	
4. During or soon after bacteriological quality problems, did you receive any complaints of any customers' illness suspected of being waterborne? How many?	
5. What were the symptoms of illness if you received complaints about customers being sick?	

SUMMARY: Based on the results of your investigation and any other available information, what do you believe to be the cause(s) of the positive total coliform sample(s) from your water system. (Do not leave blank)

CORRECTIVE ACTIONS: What actions have you taken to correct the above mentioned issue(s)? If additional time is needed to correct a deficiency, indicate the date that it will be corrected. (Do not leave blank)

CERTIFICATION: I certify that the information submitted in response to the questions above is accurate to the best of my knowledge.

NAME: _____ TITLE: _____ DATE: _____